

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A semiconductor diffusion prevention structure, comprising:

a silicide layer formed on a semiconductor substrate; and

a ternary phase layer formed on said silicide layer, wherein the ternary phase layer is formed of Co, Si and a metal which is selected from a group consisting of Ti, ~~Sn~~, Ta, W, V, Cr, Mn, Zr, Mo and Hf.

2-4. (Cancelled)

5. (Currently Amended) A semiconductor device, comprising:

a semiconductor substrate;

an insulator film formed on said substrate to define a contact hole such that said substrate is exposed;

a silicide layer formed on said substrate and bottom of said contact hole;

a ternary phase layer formed on said silicide layer, wherein said ternary phase layer is formed of Co, Si and a metal which is selected from a group consisting of Ti, ~~Sn~~, Ta, W, V, Cr, Mn, Zr, Mo and Hf;

a conductive plug on said diffusion prevention layer in said contact hole; and

a conducting layer on said conductive plug.

6. (Previously Presented) The semiconductor device of claim 5, further comprising:

a first metal film formed on sidewalls of the contact hole;  
and

a second metal film formed on the first metal layer.

7. (Previously Presented) The semiconductor device of claim 6, wherein the first metal film is a Co film.

8. (Previously Presented) The semiconductor device of claim 7, wherein the second metal film is one selected from a group consisting of a Ti film, a Ta film, a W film, a V film, a Cr film, a Mn film, a Zr film, a Mo film and a Hf film.